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(56) Documents Cited

EP 0999678 A2

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EP 0971327 A2

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(58) Field of Search

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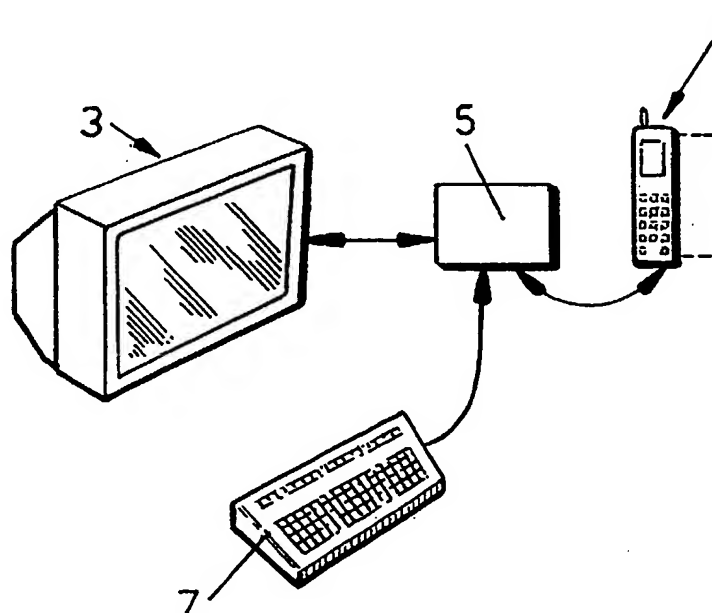
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(54) Abstract Title

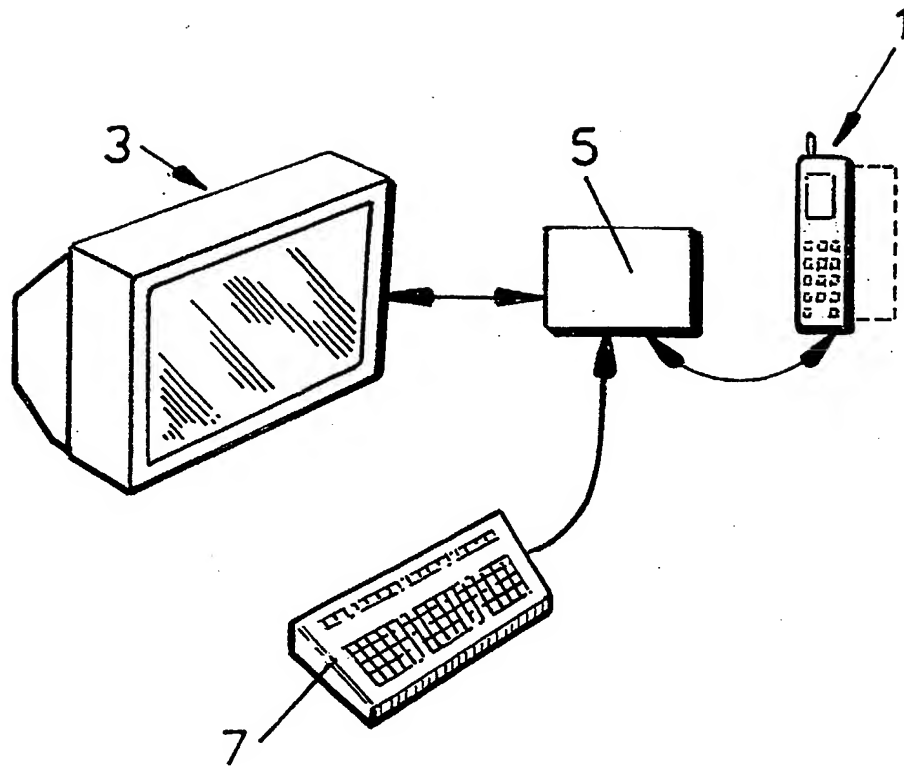
Displaying mobile internet information

(57) A video output device for information received by a mobile with access to the web. The handset may be WAP enabled, capable of capturing email information. The video device may be a television with an interface. The output from the mobile may be a RGB video or a higher level video signal. A cradle may be provided for physical conductors to connect the handset and video, or infrared may be used. The system may be a remote monitoring system.



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Title : Displaying of WAP Phone Information

DESCRIPTION

The present invention relates to mobile communication systems such as WAP phones and in particular to displaying information captured by a WAP phone, but without limitation to the WAP protocol.

A recent development in mobile communications resides in the advent of the wireless application protocol (WAP) phone which as well as being able to send and receive text messages and voice communications, is also able to access web based services. The screen for displaying the data is much smaller than a typical computer screen on which the web information is usually viewed when accessed using software loaded on the computer. However, scrolling arrangements have been devised to cater for the small screen size.

The present invention provides a means by which information, especially captured web information, captured by for example a WAP phone, can be displayed in a more convenient form.

Accordingly, the present invention provides a system for displaying web information comprising a mobile communication handset to access web based services, and a video output device, characterised in that the web information accessed by the handset is displayed on a screen of the video output device.

The handset may be a WAP communications device which is capable of capturing e-mail and/or other web information.

The video output device is conveniently a television. The use of a conventional television screen for displaying the web information provides viewing convenience whilst avoiding the need for a home computer which can access the web based services as this

function can be performed by the mobile communication handset. Thus the intelligence contained in the handset phone is used to access the web based services whilst the television is used to provide a convenient viewing screen. Of course, the in built display of the handset can be used when there is no television available for displaying the information.

In order to be able to display the web information on the screen of the video output device a suitable interface is required. This may be incorporated in the video output device (e.g. television), incorporated in the mobile communication handset or more usually provided in a self-contained freestanding unit. The latter is the preferred and most likely solution. Where the interface is incorporated in the handset, output terminals will be provided on the handset carrying a signal which can be directly input into the television. These signals may be a composite RGB video or higher-level video signal. Where the interface is external to the handset, the handset will provide an output connection for an output signal which can be operated upon by the interface to produce a video signal which can be displayed by the television. Preferably, the output signal is the screen driver signal of the handset, i.e. the signal after processing so that the interface does not have to duplicate the intelligence provided by the handset for interrogating the web information. Most conveniently a cradle is provided in which the handset is received and which provides has the necessary signal connection provisions be they by way of physical-conductors or infrared. A wired or wireless user input device is preferably provided for the interface and which can be used in place of the key input facilities of the handset.

The interface provides full control of the functionality of the Mobile Communications handset via the remote user interface whilst relaying the display data from the Mobile.

The present invention will now be described further by way of example only with reference to the accompanying drawing which illustrates the present invention schematically.

The drawing illustrates a mobile communication handset, such as a WAP phone, 1, a television screen 3 and shows an interface 5. The interface has been shown as a separate component but may be incorporated in the television or in the WAP phone. The handset incorporates intelligence to process the web based information and the signals which would normally be relayed to the display on the handset are intercepted and fed into the interface to generate a video output which is fed to the television screen.

Conveniently, placing the handset in a cradle (not shown) triggers operation of the interface. Also illustrated is a keyboard 7 which is preferably provided with bi-directional communications so as to allow the keyboard to directly control the handset as well as the data from the handset to be displayed on the television.

The invention makes possible use of a standard handset placed in a quick release cradle (such as that used for a car handsfree kit) which can also be used as a communications medium for the type of system described in our co-pending patent application numbers WO99/48070, GB99284556, GB00055939 and that filed simultaneously with this application relating to remote monitoring systems. This product may provide functionality as outlined therein including e.g. Alarm Monitoring/Meter Reading/Smoke & Gas detection/Interactive TV SMS Email/Remote Control/Power Fail plus the added functionality of WAP browsing - (all of course subject to the handset being in the cradle).

The cradle should provide access to the normal SMS and Data functionality of the handset as per standard data cables/IR interfaces but should also allow output of display data and input of keystroke/control data to provide WAP browsing functionality via an

attached Television and Infra-red keyboard. The above example refers to the WAP protocol but it will be appreciated that the standard data interfaces will change and that the reference to WAP is merely to be seen as an example and not to be seen as limiting the scope of the invention.

CLAIMS

1. A system for displaying web information comprising a mobile communication handset to access web based services, and a video output device, characterised in that the web information accessed by the handset is displayed on a screen of the video output device.
2. A system as claimed in claim 1, wherein the handset is a wireless application protocol (WAP) communications device, which is capable of capturing email and/or other web information.
3. A system as claimed in claim 1 or 2, wherein the video output device is a television.
4. A system as claimed in any one of claims 1 to 3, further comprising an interface to enable web information to be displayed on the screen of the video output device.
5. A system as claimed in claim 4, wherein the interface is incorporated in the video output device.
6. A system as claimed in claim 4, wherein the interface is incorporated in the mobile communication handset.

7. A system as claimed in claim 4, wherein the interface is provided in a self contained free-standing unit.
8. A system as claimed in claim 6, wherein output terminals are provided on the handset carrying a signal, which signal can be directly input into the television.
9. A system as claimed in claim 8, wherein the signal is a composite RGB video signal.
10. A system as claimed in claim 8, wherein the signal is a higher level video signal.
11. A system as claimed in claim 4, wherein the interface is external to the handset.
12. A system as claimed in claim 11, wherein the handset provides an output connection for an output signal, which output signal can be operated upon by the interface to produce a video signal which can be displayed by the television.
13. A system as claimed in claim 12, wherein the output signal is the screen driver signal of the handset.

14. A system as claimed in claim 11, 12 or 13, wherein a cradle is provided in which the handset is received and which provides the necessary signal connection provisions.
15. A system as claimed in claim 14, wherein the signal connection provisions are by way of physical conductors.
16. A system as claimed in claim 14, wherein the signal connection provisions are by way of infrared.
17. A system as claimed in any one of claims 4 to 16, wherein a user input device is provided for the interface, which can be used in place of the key input facilities of the handset.
18. A system as claimed in claim 17, wherein the input device is wired.
19. A system as claimed in claim 17, wherein the input device is wireless.
20. A system substantially as hereinbefore described with reference to the accompanying drawing.



INVESTOR IN PEOPLE

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Claims searched: 1-20

Examiner: Robert Shorthouse
Date of search: 8 January 2002

Patents Act 1977
Search Report under Section 17

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Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:
UK Cl (Ed.T): H4L (LEUG, LESF, LECY, LEUX, LED)
Int Cl (Ed.7): H04N 5/445, 7/14
Other: Online: WPI, EPODOC, JAPIO, INSPEC

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	EP 0999678 A2 (CITIBANK) See abstract and column 6 lines 4-17	1-4, 7, 11, 12, 14 and 15 at least
X	EP 0971327 A2 (CITIBANK) See fig. 1 and column 3 lines 13-22	1-4, 7, 11 and 12 at least
X, E	WO 01/60089 A1 (NOKIA) See page 2 lines 22-34	1-4, 7, 11 and 12 at least
X, E	WO 01/57632 A1 (ROKE MANOR) See page 2 lines 4-8	1, 2 and 4 at least
X, E	WO 01/48715 A2 (NOKIA) See page 2 line 15-30	1-4, 7, 11 and 12 at least
X, E	WO 01/41408 A1 (ERICSSON) See page 3 line 10 - page 4 line 16 and figure 1.	1-4 at least

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

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